

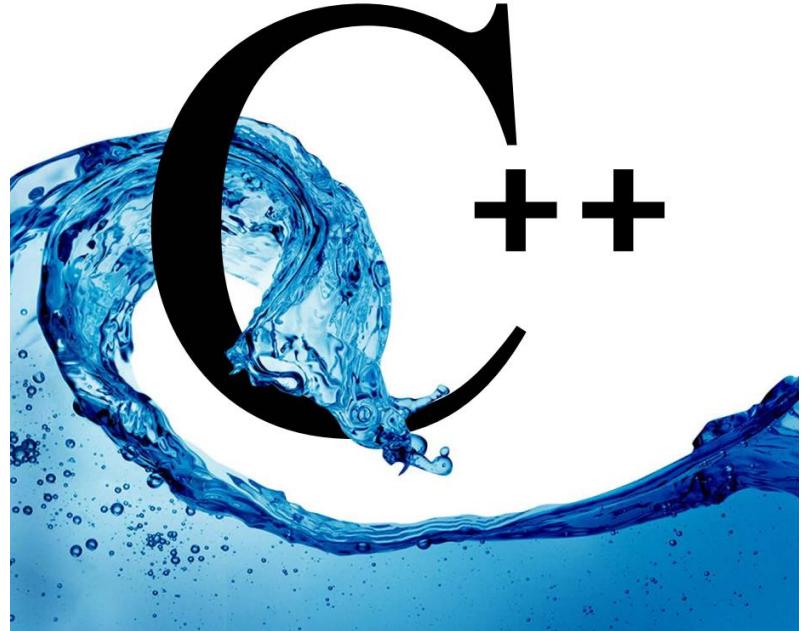


ME 110

Computation for

Mechanical

Engineering



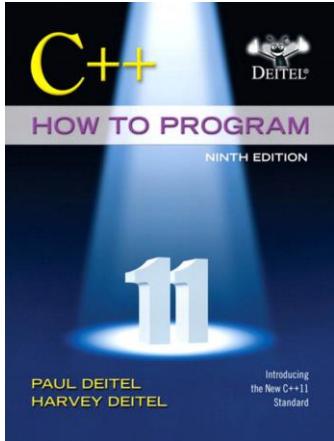
Lecture 1

Introduction to the course

Web Resources for the Course

- ▶ **University of Gaziantep C++ resource page**
cpp.gantep.edu.tr
 - Tutorials, Sample Programs, Howtos
 - We will follow the “*Basic tutorial*” section.
- ▶ **C++ Resources Network:**
www.cplusplus.com
- ▶ **C++ Reference:**
www.cppreference.com
- ▶ <http://www.doc.ic.ac.uk/~wjk/C++Intro/>
- ▶ **Also search Google and Wikipedia for any of the expressions used in this course.**

Course Books



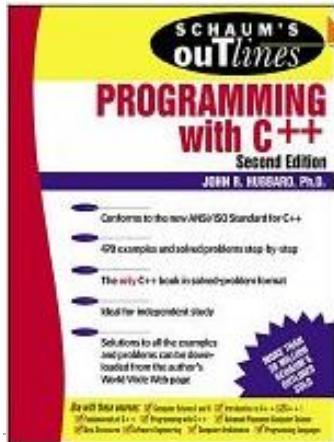
C++ How to Program

Poul and Harvey Deitel, Pearson Education (2024)

ALEX ALLAIN
CREATOR OF CPROGRAMMING.COM

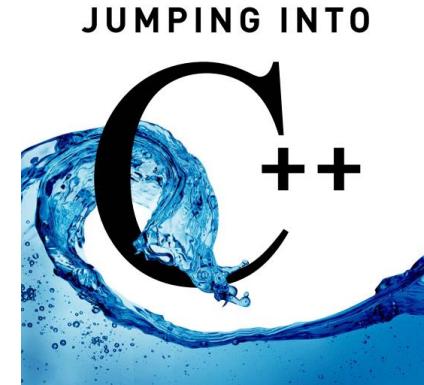
Jumping into C++,

Alex Allain, www.cprogramming.com



Programming with C++,

John R. Hubbard Schaum Outline Series (2000)



Course Content

| ME 110 COMPUTATION FOR MECHANICAL ENGINEERS COURSE CONTENT | | | |
|--|-----------|---------|--|
| Title | Date | Class | |
| Introduction to the Course | 9.2.2026 | MD Amfi | |
| Introduction to the programming, C++ Structure and programming, C++ Data Types | 11.2.2026 | MD Amfi | |
| Computer Lab-1 | 16.2.2026 | B.i.M | |
| C++ operators, intrinsic functions and strings | 18.2.2026 | MD Amfi | |
| Computer Lab-2 | 23.2.2026 | B.i.M | |
| Control structures: Selection | 25.2.2026 | MD Amfi | |
| Computer Lab-3 | 2.3.2026 | B.i.M | |
| Control structures: Repetitive structures | 4.3.2026 | MD Amfi | |
| Computer Lab-4 | 9.3.2026 | B.i.M | |
| MIDTERM-I | 11.3.2026 | | |
| Solutions of Midterm I | 16.3.2026 | B.i.M | |

| | | |
|-----------------------------------|-----------|---------|
| Formatted I/O | 18.3.2026 | MD Amfi |
| Computer Lab-5 | 23.3.2026 | B.i.M |
| File processing | 25.3.2026 | MD Amfi |
| Computer Lab-6 | 30.3.2026 | B.i.M |
| Functions I: | | |
| Introduction and Basics (Part I) | 1.4.2026 | MD Amfi |
| Computer Lab-7 | 6.4.2026 | B.i.M |
| Functions II: | | |
| Introduction and Basics (Part II) | 8.4.2026 | MD Amfi |
| Computer Lab-8 | 13.4.2026 | B.i.M |
| Arrays | 15.4.2026 | MD Amfi |
| Computer Lab-9 | 20.4.2026 | B.i.M |
| Multidimensional Arrays | 22.4.2026 | MD Amfi |
| Computer Lab-10 | 27.4.2026 | B.i.M |
| MIDTERM-2 | 29.4.2026 | |
| Solutions of Midterm II | 4.5.2026 | B.i.M |
| Vectors | 6.5.2026 | MD Amfi |
| Computer Lab-11 | 11.5.2026 | B.i.M |
| MS Word, Excel, Powerpoint Basics | 13.5.2026 | MD Amfi |
| Computer Lab-12 | 18.5.2026 | B.i.M |
| TUTORIAL | 20.5.2026 | MD Amfi |

Lectures, Labs, Attendance, Exams

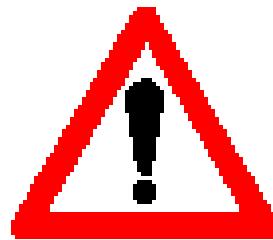
- ▶ **NOTE TO THE COURSE CONTENT AND DATES!!**
- ▶ **Lectures**
 - ▶ two-hour lecture in **MERKEZİ DERSLIK** Amphi
- ▶ **Applications**
 - ▶ two-hour programming session in **BIM Lab. 1 and 2**
- ▶ **Attendance**
 - ▶ You must attend at least 70% of the course
- ▶ **Exams**

All are written exams

| | |
|------------------|-----|
| ▶ First midterm | 30% |
| ▶ Second midterm | 30% |
| ▶ Final | 40% |

Computer Labs

- ▶ **We will learn C++ using the Dev-C++ compiler under Windows**
- ▶ **Every week you should write a few programs yourself in the BIM lab (and more in your free time).**
- ▶ **In the BIM Computer Labs your programs will be deleted when the computer restarted. So you need to save them on a flash drive or on the internet.**



**DO NOT FORGET TO BRING
YOUR LAPTOP or FLASH DISK WITH YOU**

